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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,001	03/21/2001	Jeffrey P. Grundvig	GRUNDVIG 25-14	4087

7590 02/22/2006  
MANELLI DENISON & SELTER PLLC  
2000 M Street, N.W., 7th Floor  
Washington, DC 20036-3307

EXAMINER

CHO, UN C

ART UNIT	PAPER NUMBER
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2687

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/813,001

Applicant(s)

GRUNDTVIG ET AL.

Examiner

Un C. Cho

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 12 is/are allowed.
- 6) ☒ Claim(s) 1- 6,8- 11 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 6, 8 – 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson (US 6,975,613 B1) in view of Hoirup et al. (US 6,308,076 B1).

Regarding claim 1, Johansson discloses a wireless piconet device (Master Node (Fig. 1, 122)), comprising a wireless piconet front end including a receiver portion and a transmitter portion (Johansson, Col. 3, lines 6 – 21); and an inter-piconet scheduler adapted to contain a plurality of entries each corresponding to a device in a piconet including said wireless piconet device (Johansson, Col. 7, lines 10 – 59).

However, Johansson as applied above does not specifically disclose a frequency offset history table adapted to contain a plurality of entries each corresponding to a past frequency offset of a device in a piconet including said smart compensation wireless piconet device; wherein an expected center frequency of a signal received by said receiver portion is adjusted based on one of said plurality of entries in said frequency offset history table corresponding to a device transmitting said signal. In an analogous art, Hoirup discloses a frequency

offset history table adapted to contain a plurality of entries each corresponding to a past frequency offset of a device in a wireless network including said wireless device (storage (Fig. 2, 20); Hoirup, Col. 5, lines 37 – 48); wherein an expected center frequency of a signal received by said receiver portion is adjusted based on one of said plurality of entries in said frequency offset history table corresponding to a device transmitting said signal (Hoirup, Col. 6, line 28 through Col. 7, line 3 and lines 33 – 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Hoirup to the system of Johansson in order to provide a system that stores frequency settings in a memory of the wireless device so that it allows rapid switching between frequency sources while performing synchronization, thus, saving time and lowering power consumption of the wireless device.

Regarding claim 2, Johansson in view of Hoirup as applied above discloses a local oscillator to control a transmit frequency of said transmitter portion of said wireless piconet front end (Hoirup, Col. 6, line 67 through Col. 7, line 3).

Regarding claim 3, Johansson in view of Hoirup as applied above discloses wherein said wireless piconet front end is a BLUETOOTH front end (Johansson, Col. 3, lines 6 – 21).

Regarding claims 4 and 9, the claims are interpreted and rejected for the same reason as set forth in claim 1.

Regarding claims 5 and 10, the claims are interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 6, Johansson in view of Hoirup as applied above discloses calculating an actual frequency offset based on said received information packet (Hoirup, Col. 8, lines 28 – 51).

Regarding claims 8 and 13, the claims are interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 11, the claim is interpreted and rejected for the same reason as set forth in claim 6.

***Allowable Subject Matter***

3. Claims 7 and 12 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 7, Johansson in view of Hoirup either alone or in combination fails to teach replacing in said receiving piconet device said past frequency offset value for said transmitting piconet device with a new frequency offset calculated based on said calculated actual frequency offset.

Regarding claim 12, the claim is interpreted and allowed for the same reason as set forth in claim 7.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1 – 6, 8 – 11 and 13 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C. Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Un C Cho  
Examiner  
Art Unit 2687

2/13/06 *de*

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER